PROBLEMS AND SOLUTIONS - PERCENTS
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Please Send Questions and Comments to ingrid.stewart@csn.edu. Thank you!

YOU MUST BE ABLE TO DO THE FOLLOWING PROBLEMS WITHOUT A CALCULATOR!

The solutions are listed below the problem set!

Problem 1:

Express **75%** as a decimal number.

Problem 2:

Express **23.4%** as a decimal number.

Problem 3:

Express **115%** as a decimal number.

Problem 4:

Express **0.42%** as a decimal number.

Problem 5:

Express **30%** as a decimal number.

Problem 6:

Express **500%** as a decimal number.

Problem 7:

Express **75%** as a fraction reduced to lowest terms.

Problem 8:

Express **23.4%** as a fraction reduced to lowest terms.

Problem 9:

Express ***115%*** as a fraction reduced to lowest terms.

Problem 10:

Express ***0.42%*** as a fraction reduced to lowest terms.

Problem 11:

Express ***30%*** as a fraction reduced to lowest terms.

Problem 12:

Express ***0.0263*** as a percent.

Problem 13:

Express ***3.987*** as a percent.

Problem 14:

Express ***0.4*** as a percent.

Problem 15:

Express ***3*** as a percent.

Problem 16:

Express $\dfrac{3}{8}$ as a percent.

Problem 17:

Express $\dfrac{7}{10}$ as a percent.

Problem 18:

Express $1\dfrac{2}{3}$ as a percent. Round to one decimal place.

Problem 19:

What number is 10% of 388?

Problem 20:

What percent of 150 is 30?

Problem 21:

60 is 30% of what number?

Problem 22:

A certain automobile cooling system has a capacity of 6 gallons of fluid. To give protection to -10⁰ F, 40% of the cooling system capacity must be antifreeze. How many gallons of antifreeze should be used?

Problem 23:

The first baseman of a baseball team caught 33 out of 55 balls. What percent is this?

Problem 24:

A client's medication was increased by 32.5 mg or 10% per day. How many mg did the client get on the day before the increase?

Problem 25:

Assume that your restaurant bill is $12.60. You want to leave a 15% tip, but you are too embarrassed to pull out a calculator. Therefore, you decide to estimate the tip by rounding to the nearest ones (dollar). What is it?

Problem 26:

As you stroll through the Gap, you are excited to find a great sale on jeans. The are normally $95, but the store has reduced the price by 30%. You forgot your calculator and you are too embarrassed to ask the sales person how much less you have to pay for the jeans. Therefore, you decide to estimate the discount by rounding to the nearest dollar. What is it?

Problem 27:

Student fees collected by a college this year was 3 times more than last year. What is the percent increase?

SOLUTIONS

You can find detailed solutions below the link for this problem set!

1. 0.75	2. 0.234	3. 1.15
4. 0.0042	5. 0.3	6. 5
7. $\dfrac{3}{4}$	8. $\dfrac{117}{500}$	9. $1\dfrac{3}{20}$
10. $\dfrac{21}{5,000}$	11. $\dfrac{3}{10}$	12. 2.63%
13. 398.7%	14. 40%	15. 300%
16. 37.5%	17. 70%	18. 166.7%
19. 38.8	20. 20%	21. 200
22. 2.4 gallons	23. 60%	24. 325 mg
25. $2	26. $30	27. 200%